

# **EXHIBIT B**

**[FILED UNDER SEAL]**

1 A. I don't have an opinion on that.

2 Q. (By Mr. Perlson) So, one of the terms that  
3 comes up in connection with the case-based knowledge  
4 engine is the word "case." How have you been using  
5 "case" in connection with formulating your opinion of  
6 infringement?

7 MR. GIZA: Objection, form.

8 A. I think I've used it in the way in which the  
9 claims of this patent have used it. It just crops up in  
10 the claims. Initially in the case base, but then later  
11 on they talk about a case in the stored case and things  
12 like that. I've used them as sort of a way of defining  
13 an instance of something.

14 Q. (By Mr. Perlson) Okay. Is it any more narrow  
15 than that, or it's just any instance of anything or --

16 MR. GIZA: Objection, form.

17 A. Well, I think -- I think if I take it out of  
18 the context, for example, of the Step 26B, where it says

~~19 interpreting for the electronic message, in that~~

20 instance, the case has to be something that can be used  
21 for the purpose of interpreting the electronic message.  
22 So, I mean, I've got a context to work in, and I haven't  
23 tried to expand outside of that.

24 Q. (By Mr. Perlson) Well, maybe in -- I'll try to  
25 ask you a more specific question.

1                   In the construction of case-based  
2 reasoning, it makes a reference to exemplar cases.

3           A.    Yes.

4           Q.    So, what -- how have you used exemplar cases in  
5 connection with formulating your opinion?

6                   MR. GIZA:  Objection, form.

7           A.    It would be a set of things that you can  
8 compare to in some way to understand the instance that  
9 you have received in the electronic message.

10          Q.    (By Mr. Perlson)  So, in the context of case-  
11 based reasoning, as described in the patent, it makes  
12 reference to using -- and this is in reference to the  
13 Allen -- when discussing, for example, the Allen patent  
14 in the column 2, it makes reference to comparing an  
15 incoming set of facts a problem to a stored set of  
16 exemplar cases, and it says case base.

17                   The -- is the case base made up of prior  
18 problems?

~~19          A.    That's the way --~~

20                   MR. GIZA:  Objection, form.

21          A.    That's the way that the specification  
22 characterizes Allen in that particular instance.

23          Q.    (By Mr. Perlson)  Okay.  So do you think that  
24 -- that exemplar case is -- needs -- needs to have the  
25 prior problems, or can it be solutions as well?

1 MR. GIZA: Objection, form.

2 A. I don't think, given the broadness of the  
3 language of the claim itself, especially as construed by  
4 the court, that it has to be prior problems at all. It  
5 just has to be something that can be the basis for  
6 processing the received electronic message by comparing  
7 it to this -- to this stored set of exemplar cases,  
8 which you're free to have anything there that can be  
9 useful in processing the message by comparing against.

10 Q. (By Mr. Perlson) Okay. So you also, then, I  
11 presume, would not agree to limit the exemplar cases to  
12 either prior or anticipated problems?

13 MR. GIZA: Objection, form.

14 A. Well, help me out here with what you mean by  
15 prior -- I mean, I understand what they said about  
16 Allen, but now we're talking away from Allen. So, I  
17 think the context of what you may mean by "problems" is  
18 just too broad. I don't know how to deal with it in  
19 general.

20 Q. (By Mr. Perlson) Well, a case base reasoning  
21 is -- you know, and correct me if you disagree, but I  
22 think it's consistent with what you have indicated  
23 before, was that it involves, you know, using -- let me  
24 try to ask it a different way. So, let me ask you in  
25 the context of the -- the embodiment of the patent, and

1 maybe -- maybe that will be a clearer way of doing it.

2 So the patent talks about the preferred  
3 embodiment of responding to e-mails, right?

4 A. Yes.

5 Q. And in the context of the patent, what it --  
6 and the specification is describing using -- taking an  
7 incoming e-mail, and then compare it to prior e-mails,  
8 and then pulling a response that might have been  
9 provided in response to a prior e-mail. Is that  
10 generally correct?

11 MR. GIZA: Objection, form.

12 A. That's my current understanding of what -- the  
13 preferred embodiment. It's certainly not the scope of  
14 the patent, and the patent specifically says that you  
15 can do other things beside e-mail. But in that  
16 instance, meaning the preferred embodiment, it, as I  
17 recall, what's stored or some -- something related to  
18 previously received and processed e-mails.

19 Q. (By Mr. Perlson) Okay. And so in the context  
20 of using the e-mail example, let's -- let's say that  
21 there was a system that was responding to e-mails, would  
22 the case base not have to include any actual e-mails to  
23 compare it to at all, in your opinion?

24 MR. GIZA: Objection, form.

25 A. I don't know how to deal with the "not have

1 to." I mean, the preferred embodiment, as I recall,  
2 from the patent, is a set of previously processed  
3 e-mails. So, it does. I don't know --

4 Q. (By Mr. Perlson) I guess what I'm trying to --

5 A. -- "not have to" is the right phrase.

6 Q. I guess what I'm trying to get at is whether  
7 you think that in Claim 26, in the requirement of the  
8 case base knowledge engine, whether the exemplar cases  
9 could be -- if, for example, the system was being used  
10 in responding to e-mails -- could simply be responses to  
11 e-mails without any actual e-mails in the case base?

12 MR. GIZA: Objection, form.

13 A. I have no idea. Okay. I mean, I -- I hadn't  
14 thought about that, so I don't know.

15 Q. (By Mr. Perlson) So, getting back to the, kind  
16 of, this problem solution nomenclature, the -- in the  
17 context of the e-mails, as described in the patent, I  
18 guess I would say that the incoming e-mail is a problem,  
19 and then the past e-mails would be prior problems, and  
20 then those past responses would be past solutions? Does  
21 that make sense? I mean, do you understand what I'm --

22 A. I can understand that vocabulary.

23 Q. Okay, yeah.

24 A. Is it relative to the preferred embodiment?

25 Q. And so could -- if you had a system that had --

1 that didn't store any actual prior e-mails, the  
2 problems, and just had the solutions, and the incoming  
3 e-mails were compared with the prior solutions, would  
4 those -- in your opinion, those prior solutions could  
5 still be exemplar cases?

6 MR. GIZA: Objection, form.

7 A. There's two parts to that question, I think.

8 Could those solutions be exemplar cases?

9 Yes. They would be something that you could compare  
10 to. And could somebody figure out a way to make that  
11 comparison in a meaningful and useful way? Maybe. I  
12 don't know. That's not what they did with the preferred  
13 embodiment in the patent. But that's not to say that  
14 someone couldn't do it that way.

15 Q. (By Mr. Perlson) If -- just focusing on the  
16 case-based knowledge engine component of the '947 patent  
17 at the moment, if I had a system that -- actually, I'll  
18 start over again.

19 In the past, computers used to be shipped  
20 with like Encarta Encyclopedias. Do you remember that?

21 A. That was a popular piece of interfering wear  
22 that people shipped with, yes.

23 Q. Right. And there were encyclopedia entries,  
24 and you could search for something in an encyclopedia  
25 entry using that software, right?

1           A.    I never actually used it, but I'm sure that's  
2   probably what it provided.

3           Q.    Would it be appropriate to consider the entries  
4   in the encyclopedia as exemplar cases in that context?

5                   MR. GIZA:  Objection, form.

6           A.    I don't have any opinion about that.  I just  
7   hadn't thought of that.

8           Q.    (By Mr. Perlson)  Well, what more information  
9   would you need?

10          A.    I'd have to think about it for a while to try  
11   to figure out -- to form an opinion.  I mean, and I  
12   believe there's probably just one big text file, and I  
13   don't tend to think of word search in a text file, which  
14   is what I gather maybe is what we're talking about here,  
15   as -- as being a form of even rule based or case  
16   based.  It's just word search.  So, a matching process.

17          Q.    Okay.  So you would agree that matching in and  
18   of itself is -- is different than case-based reasoning?

19                   MR. GIZA:  Objection, form.

20          A.    No.  If you're matching, in the case with the  
21   claims, for example, an electronic message against the  
22   cases in the exemplar set of cases, then -- then I  
23   wouldn't agree with that.

24          Q.    (By Mr. Perlson)  Well, I guess then that's --  
25   I guess that's what I'm trying to get at then.  If --



1 let's say that the encyclopedia was set up as a lookup  
2 table -- do you know what a lookup table is?

3 A. Yes.

4 Q. What's a lookup table?

5 A. That's usually thought of as a table that has  
6 two columns, and there's an index of some kind that  
7 you're using to use to look up on the left-hand side,  
8 and there's the corresponding value that's on the right-  
9 hand side.

10 Q. Okay. And if the entries in the encyclopedia  
11 were set up using a lookup table, and you did a search  
12 and matched the -- the search up with the entries on the  
13 lookup table, would that be case-based reasoning?

14 MR. GIZA: Objection, form.

15 A. I wouldn't immediately tend to think that it  
16 was.

17 Q. (By Mr. Perlson) Why not?

18 A. I just wouldn't apply that rubric to that

19 particular situation. I would say that's table lookup:

20 Q. Okay. And -- okay. And so that -- what's the  
21 distinction between table lookup, then, and case-based  
22 reasoning?

23 A. I didn't say that --

24 MR. GIZA: Objection form.

25 A. I didn't say that there was a distinction. I

1 just said I personally would not have thought of that as  
2 being within the scope of what I would expect to call  
3 case based.

4 Q. (By Mr. Perlson) Well, in my hypothetical, we  
5 have, you know, that's a search, a word, and then it's  
6 compared against what's in the lookup table, and there's  
7 the results that match it, a return. Why wouldn't that  
8 be case-based reasoning under your interpretation of how  
9 the court has construed that?

10 A. I haven't said --

11 MR. GIZA: Objection, form.

12 A. I haven't said it wouldn't be. I just said  
13 that's not -- if you ask me what -- what do I know about  
14 case-based reasoning, I probably would not have  
15 immediately thought of table lookup. But in some  
16 instances, that would be a way to arrange the storage of  
17 the exemplar cases. And there you would look -- I  
18 gather you would have an incoming word or words that you  
19 were looking for. You would compare to this first  
20 column and then get the second column. I can understand  
21 how that could be inferred as a case-based instance. I  
22 just have never put table lookup in my head in the area  
23 that I tend to think of as case based comparisons.  
24 Sitting here now today as best I can think of it, I can  
25 understand why someone would argue that it was.

1 Q. (By Mr. Perlson) What are the case -- let me  
2 back up. For the purposes of your -- forming your  
3 opinions of infringement in this case, can you identify  
4 for me all the types of exemplar cases that you have  
5 found in Google systems?

6 A. I think it's primarily one thing: It's the  
7 advertisements and their attributes that have been  
8 linked to the advertisements by the people who created  
9 the advertisements in the first place.

10 Q. So is it the -- does it need to be both? Is it  
11 just the creative, or is it the creative and the  
12 attributes?

13 A. The latter.

14 Q. Okay. And then so just to avoid some of the --  
15 the different use of attributes, when you are talking  
16 about attributes in that context, what are you referring  
17 to?

18 A. A typical thing would be key words,  
19 geotargeting limitations; ultimately, the bid price and  
20 all, but I haven't really focused on that so much as  
21 just the things about the ad that the advertiser said  
22 over and above what you call the creative, the text of  
23 the ad, the first and second lines, for example, and the  
24 display and actual URL; those types of things.

25 Q. Okay. So is the -- the creative alone is not

1 an exemplar case; is that right?

2 MR. GIZA: Objection, form.

3 A. My guess is that there might be instances where  
4 someone entered an ad and only entered the creative, but  
5 that would be overly restrictive to me. I think it's  
6 the -- it's everything that the advertiser put in when  
7 they created the ad for Google to place.

8 Q. (By Mr. Perlson) Okay. And then we have also  
9 seen, in the claims of the '947 patent case, models,  
10 right?

11 A. Yes.

12 Q. Okay. Can you identify for me -- there's the  
13 case model of the electronic message, and put that aside  
14 for the moment. Can you identify for me all the types  
15 of stored case models that you have identified and  
16 relied on in Google systems in formulating your opinions  
17 on infringement?

18 MR. GIZA: Objection, form.

19 A. Give me a minute. I just want to review --

20 Q. Sure.

21 A. -- that usage of that particular term in my  
22 report and the claims.

23 (Reading documents.) I think that term  
24 appears, at least initially, in Step 30(b1), where they  
25 talk about producing a case model of the electronic

1 message, including a set of attributes for identifying  
2 specific features of the electronic message and message  
3 text.

4           What I have focused on there is the  
5 received query sent in as an HTTP request, and in fact,  
6 on page 27, I said, "For example, the AdWords system  
7 produces a case model of the electronic message (the  
8 HTTP text that includes --" excuse me -- "(HTTP  
9 request), that includes the text --" I said there "the  
10 raw query text and attributes," and I specifically  
11 identified there things like the user location, and/or  
12 additional terms related to or derived from the raw  
13 query text. So, it's what I typed into the search  
14 window plus the other information that is associated  
15 with that raw query that's available to the Google  
16 system. It's more than the raw query.

17           And later on, there are instances where I  
18 deal with the interpretation of that with things like  
19 cleaning up spelling, and then a bunch of other things  
20 that are discussed in the report.

21           Q.    (By Mr. Perlson) The paragraph 87 of your  
22 report, you talk about the case model being in the form  
23 of a Query Event object?

24           A.    Yes.

25           Q.    And what does that refer to?

1           A.    That -- I'd have to look at the source code to  
2    be a hundred percent sure, but I believe that the  
3    software has defined both an AdRequest object -- I'm  
4    talking about in the context of C++ -- and a QueryEvent  
5    object, and that that that's the way in which the query  
6    is moved along in the processing of that software.

7                    It moves from one object.  Its  
8    characteristics, its values are then loaded into this  
9    QueryEvent object.  I don't remember what all the slots  
10   were in that object, but I remember that it's in there  
11   and defined in the -- in the software.

12          Q.    Okay.  In -- I guess in Step 30(b4), it refers  
13   to stored case models of the case base?

14          A.    Yes.

15          Q.    And so what are the -- can you identify for me  
16   all of the types of stored case models that you've  
17   opined meet that limitation?

18          A.    It would be --

~~19                    MR. GIZA:  Objection, form.~~

20          A.    It would be kind of like we talked about a  
21   moment earlier, in the case of that -- stored case  
22   models, those are the exemplary cases that are in the  
23   set that -- which started out in Claim 26 doing a  
24   comparison to.  That would include the creative with its  
25   text and its URLs and the other characteristics

1 described as being used to do initial processing on the  
2 received queries.

3 Q. Okay. So, now going to the case-based  
4 knowledge engine, the next section, the two things that  
5 you identified as meeting -- as being case-based  
6 knowledge engines in AdWords system are the Ad Mixer and  
7 the Smart Ad Selection system, right?

8 A. Yes.

9 Q. Go down to paragraph 67. It says, "In matching  
10 the rewritten message to the ads in the ads database,  
11 the Ad Mixer serves as a knowledge engine that processes  
12 electronic messages by comparing them to a stored set of  
13 exemplar cases." Do you see that?

14 A. I do.

15 Q. Okay. And does the case-based knowledge -- ask  
16 a different question. Does -- in doing that, does the  
17 Ad Mixer use rules?

18 MR. GIZA: Objection, form.

19 A. I'm not aware of its use of rules. I think it  
20 basically does matching between words and the query and  
21 the key words that have been assigned to the ads.

22 Q. (By Mr. Perlson) Well, does it use rules in  
23 connection with that matching?

24 MR. GIZA: Objection, form.

25 A. I don't -- we've been going through questions

1 this afternoon I have -- I'm having less and less  
2 ability to understand what you're asking me. So I have  
3 not characterized anything that's being done in the Ad  
4 Mixer as being performing a rule.

5 Q. (By Mr. Perlson) Okay. I'm not -- I'm not  
6 asking whether you did or you didn't. I'm asking for  
7 your understanding of how the system works.

8 And so my question is: In the process of  
9 matching that you referred to in paragraph 67, does the  
10 Ad Mixer use rules?

11 MR. GIZA: Objection, form.

12 A. I have -- I don't have anything in there that I  
13 identified as being performing a rule.

14 Q. (By Mr. Perlson) You just don't know?

15 MR. GIZA: Objection, form.

16 A. I think the answer to that is no. But under --  
17 you know, if somebody wanted to say, "Hey, you know,  
18 I've got a rule here that says that these two things  
19 match, then move that ad over into the set of candidate  
20 ads," I mean, that's a way to characterize what the case  
21 base thing is doing as sort of a rule. But it's not  
22 characterized by anyone at Google, to the best of my  
23 knowledge, as -- as being a rule in the sense of a rule-  
24 based knowledge engine. But I'm saying, I can  
25 understand how somebody would characterize the case



1 match system as having something kind of like rules, but  
2 it's not anything that Google characterized as being  
3 rule based and it's not something that I would  
4 characterize as being rule based.

5 Q. (By Mr. Perlson) If you look in paragraph 69,  
6 in the -- it says, under A, "The function is the same,  
7 AdWords interprets the search query"?

8 A. Yes.

9 Q. Is interpreting a search query the function of  
10 Claim 26(b) -- or element 26(b), I should say?

11 MR. GIZA: Objection form.

12 A. Yes. At the basic, it says, "Interpreting the  
13 electronic message using a rule base and a case base."  
14 That's the fundamental function.

15 Q. (By Mr. Perlson) Okay. So its purpose is  
16 interpreting an electronic message, not necessarily a  
17 query, right?

18 MR. GIZA: Objection, form.

19 A. Well, I -- okay. Let's -- if that's troubling  
20 you and keeping you up all night, I'm -- it would seem  
21 to me that that would be clear, probably to my six-year-  
22 old grandson, that there I meant interpreting the search  
23 query as the exemplary electronic message, okay? But if  
24 it's troubling you, you could modify the actual text of  
25 the report to make that clear.

1 Q. (By Mr. Perlson) In the next section B, you  
2 have a second sentence there that says, "Whether the  
3 exemplar case includes a key word related to the ad or  
4 other historical information, the difference is  
5 insubstantial." Why is the difference insubstantial?

6 MR. GIZA: Objection, form.

7 A. I explain that in the remainder. I said in --  
8 that in the AdWords system, the query is compared  
9 against stored key words relating to the ads or other  
10 features of the ads. And in both cases, there's a  
11 comparison between the electronic message and the stored  
12 exemplar. I don't see that as being a substantial  
13 difference.

14 Q. (By Mr. Perlson) And the stored information is  
15 the historical click through rate for the ad, is that  
16 one of the pieces of stored information? Because I  
17 think that's a -- you were focusing on multipliers  
18 before, and that seems to be a little bit different than  
19 what you were saying before, but --

20 A. Well, if you --

21 MR. GIZA: Objection, form.

22 A. If you recall, I dealt with both the Ad Mixer  
23 as a portion of the overall AdWords system that  
24 infringed, as well as the SASS as another portion that  
25 could be viewed as performing the required function, and